

Facts for the Teacher: Part 1 (Auroras)

Phenomena associated with "solar weather" include Auroras. The following figures describe what auroras are, what they look like to the naked eye, and what they are called.

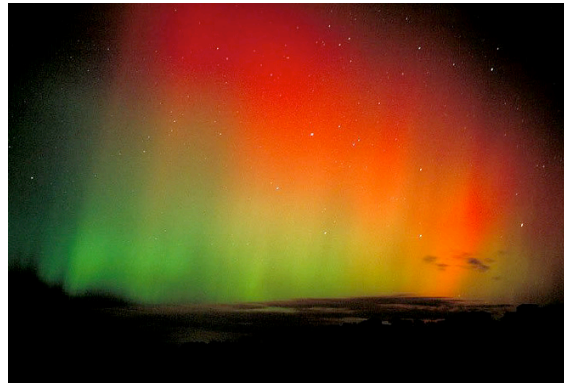
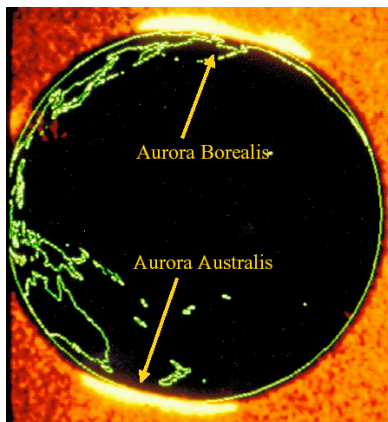


Photo taken at Forest Lake, Minnesota

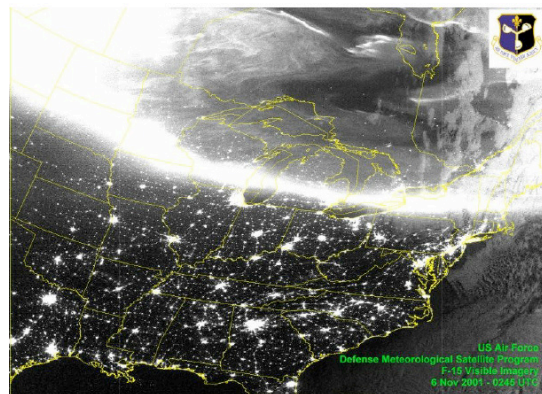
What the colors tell you:

- Different transitions are favored at different altitudes.
- Precipitating electrons with more initial energy penetrate to lower altitudes.
- So the color is related to the energy of the precipitating electrons.

Energized electrons enter the Earth's atmosphere around the polar regions. The resulting northern aurora displays are most often seen in the northern regions of the United States and Canada.



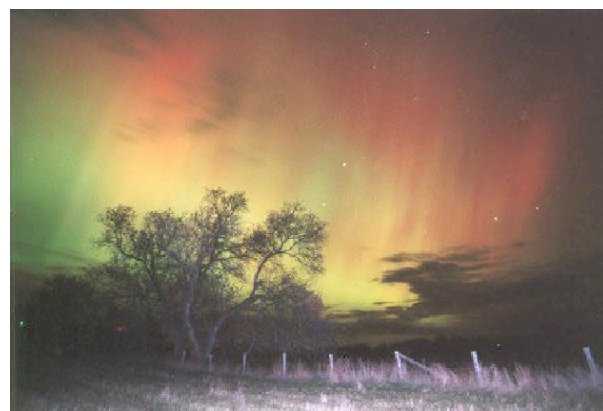
Location of Auroras



Common limits of northern auroras as seen from USAF satellite.



Aurora view from the Shuttle Discovery



Aurora photo taken in Menominee, Wisconsin